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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/049,261 | 05/09/2002 | Markus Reifferscheid | HM-467PCT | 9427 |

7590
Friedrich Kueffner
317 Madison Avenue
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10/17/2003

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| EXAMINER |
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BARR, MICHAEL E

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| ART UNIT | PAPER NUMBER |
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1762

DATE MAILED: 10/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/049,261

Applicant(s)

REIFFERSCHIED ET AL.

Examiner

Michael Barr

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3-6 and 9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4 and 5 is/are allowed.
- 6) ☒ Claim(s) 3 and 6 is/are rejected.
- 7) ☒ Claim(s) 9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 15 September 2003 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Response to Arguments

1. Applicant's arguments and amendments, filed 9/15/2003, have been fully considered and reviewed by the examiner. In light of the amendments, the objections to the specification drawings and rejections to the claims under 35 USC 112 have been withdrawn by the examiner. The examiner acknowledges the cancellation of Claims 1-2 and 7-8 and the addition of Claim 9. Claims 3-6 and 9 are pending.

The applicant argues that there is no suggestion to carrying out the claimed steps between the rinsing station through the inlet of the furnace hermetically screened from oxygen from the ambient surroundings, as Ackermann et al. only suggests making the inlet and outlet gas tight. The examiner is not persuaded by the applicant's argument. As admitted by the examiner in the previous office action, Bilimoria and Hori et al. do not teach the that steps between the rinsing station through the inlet of the furnace are carried out hermetically screened from oxygen from the ambient surroundings. However, the Ackermann et al. reference teaches a hot-dip galvanizing process and apparatus comprising a pickling station, a rinsing station, a drying station, a furnace, and a hot-dip galvanizing bath, such that each station is itself a self-contained chambers connected at short intervals in line one behind the other, where environment control of emissions are a concern. While Ackermann et al. does not specifically teach that outlet of the rinsing station through the inlet of the furnace are hermetically sealed from the ambient atmosphere, Ackermann et al. does show a detail of the furnace, whose inlet and outlet are sealed gas tight (i.e. hermetically sealed from the ambient atmosphere). One of ordinary skill in the art

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would have found it suggested to them that the pickling, rinsing, and drying stations would also have a similar gas sealed chamber design to that of the furnace, since Ackermann et al. is concerned with environmental issues such as process emissions, and thus would be an obvious design choice in Ackermann et al. As such, the connections between the stations of Ackermann et al. would hermetically sealed from the ambient atmosphere, in order to prevent process emissions. Finally, it would have been an obvious modification for one skilled in the art, to the Bilimoria and Hori et al. process, to provide use the suggested hermetically sealed, continuous chamber line of Ackermann et al. to perform the pickling, rinsing, drying, and furnace heating steps of the hot-dip galvanizing process, with the expectation of providing the desired pretreatment steps while gaining the benefit of controlled process emissions, as suggested by Ackermann et al. The applicant has not provided any specific arguments or evidence why such a modification would not have been obvious in Ackermann et al. Therefore, for the reasons provided above, it remains the examiner's position that the carrying out of the claimed steps between the rinsing station through the inlet of the furnace being hermetically screened from oxygen from the ambient surroundings would have been an obvious modification of Bilimoria and Hori et al. in view of the teachings of Ackermann et al.

Claim Objections

2. Claims 6 and 9 are objected to because of the following informalities: Line 6 and line 5 of Claims 6 and 9, respectively, contain the phrase "of another mixture...". However, the word "of" appears to be a typographical error and based upon previously presented claim 6, it appears that "of" should be "or". Appropriate correction is required.

Drawings

3. The proposed correction to the drawings were received on 9/15/2003. These drawing proposals are acceptable to the examiner.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bilimoria in view of Hori et al. and Ackermann et al.

Bilimoria, Hori et al., and Ackermann et al. are applied here for the same reasons as given above and in paragraphs 7-8 of the previous office action.

6. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bilimoria, Hori et al. and Ackermann et al. as applied to claim 3 above, and further in view of Isobe et al. and Seidel et al.

Bilimoria, Hori et al., Ackermann et al., Isobe et al., and Seidel et al. are applied here for the same reasons as given above and in paragraph 9 of the previous office action.

Allowable Subject Matter

7. Claims 4-5 and 9 are allowable over the prior art.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Barr whose telephone number is 703-305-7919. The examiner can normally be reached on Monday-Thursday 6:00 am-4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive Beck can be reached on 703-308-2333. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Michael Barr
Primary Examiner
Art Unit 1762

A handwritten signature in black ink, appearing to read 'Michael Barr', with a long horizontal flourish extending to the right.

MB
October 14, 2003